

REMARKS

Claims 14-16, 18-21 and 24 are pending in this application. By this Amendment, claims 13, 17, 22 and 23 are canceled and claims 14, 21 and 24 are amended. Support for the amendments to claims 14 and 21 can be found in the specification, for example, in original claims 17, 22 and 23. Claim 24 is amended for dependency. No new matter is added.

The Office Action rejects claims 18 and 19 under 35 U.S.C. §112, second paragraph. The rejection is respectfully traversed. Applicant has amended claim 14 to provide antecedent basis for the recitation of "said accommodating bag" in claims 18 and 19. Accordingly, withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 13-23 under 35 U.S.C. §103(a) over Starkey et al. (U.S. Patent No. 5,254,094, hereinafter "Starkey") or Ogawa (U.S. Patent No. 4,293,762) in view of Fukumoto (JP 05-237161); and rejects claims 13-22 and 24 under 35 U.S.C. §103(a) over Starkey or Ogawa in view of Fukumoto and Ersek (U.S. Patent No. 3,612,059). The rejections are respectfully traversed.

The above-applied references do not teach, and would not have rendered obvious, every claimed feature of independent claims 14 and 21. The above-applied references do not teach, and would not have rendered obvious, "the flexible accommodating bag has an outer bag constituted by a flexible sheet, and a heat conducting member...the heat conducting member is provided by a plurality of flexible heat conducting fins," as recited in independent claim 14, and as similarly recited in independent claim 21 (emphasis added).

The Office Action acknowledges, on page 3, that the above-applied references do not disclose a heat conducting member being provided by a plurality of flexible heat conducting fins. However, the Office Action asserts that the use of heat conducting fins to increase the heat conducting efficacy of a heat exchanger is an obvious improvement to a person having ordinary skill in the art. Applicant disagrees for the reasons discussed below.

Well-known fins for discharging heat are usually provided on a surface of a heat generating body and are protruded largely outward. In order to secure large surface areas to efficiently heat-exchange (to discharge heat) heat of the heat generating body, the heat discharging fins have a predetermined height. On the contrary, the heat conductive fins of the present application are provided to conduct heat (of the heat accumulating material accommodated in the accommodating bag) from the warming surface near the infusion liquid to the opposite area separated from the warming surface. For this purpose, the heat conductive fins are built in the flexible accommodating bag, or the bag-shaped main body, and are comprised of, for example, low wrinkle-shape swelling. Thus, the heat conductive fins of amended claims 14 and 21 differ from any alleged well-known heat discharging fins in both structure and operation.

Applicant notes that the flexible accommodating bag, or the bag-shaped main body, (as recited in amended claims 14 and 21), has an outer bag constituted by a flexible sheet and a heat conducting member including a portion held in contact with a warming surface of the flexible sheet that is to be opposed to the infusion fluid and another portion separated from the warming surface of the flexible sheet. Accordingly, the heat is conducted from the portion of the material held in the liquid phase to the side of the contact portion of the flexible sheet through the heat conducting fins so that the reduction in the temperature of the warmed infusion fluid can be advantageously restrained.

Additionally, the heat conducting member is provided by a plurality of flexible heat conducting fins each including an end portion connected to the warming surface of the flexible sheet that is to be opposed to the infusion fluid and another end portion separated from the warming surface of the flexible sheet. These heat conducting fins are built in the outer bag of the flexible accommodating bag or the bag-shaped main body. Accordingly, the

flexible heat conducting fins can not only securely conduct heat, but can deform together with the outer bag due to a thin sheet shape thereof.

Therefore, for at least these reasons, independent claims 14 and 21 are patentable over the above-applied references. Claims 15, 16, 18-20 and 24 depend from independent claims 14 or 21, thus claims 15, 16, 18-20 and 24 are also patentable over the applied references for at least their dependency on independent claims 14 or 21, as well as for the additional features they recite.

Thus, Applicant respectfully requests withdrawal of the rejections.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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